

#### **ABSTRACT OF THE DISCLOSURE**

The present invention provides an alignment system for deep rolling tools wherein at least one of an upper or lower tool includes an appendage received in the opposite tool when the upper and lower tools are positioned about a work piece. The present invention further provides 5 a multi roll system for deep rolling wherein both of an upper and a lower tool are provided, each of the upper and lower tools having at least two radially offset work rolls supported on substantially coplanar back up rollers. Upon engagement with a work piece, work rolls are engaged therewith in at least four radial points of contact.